Summary

The State Route (SR) 520/West Lake Sammamish Parkway to SR 202 Project is the final stage of a three-stage project to enhance vehicular movement and safety along SR 520 through Redmond, Washington. A State Environmental Policy Act (SEPA) Final Environmental Impact Statement (EIS) was published in September 1992 (Washington State Department of Transportation [WSDOT] 1992) that reviewed the project as a whole. The EIS considered four Build Alternatives and the No-Action Alternative. A modified Alternative 3, termed the Preferred Alternative, was selected for construction. The EIS speculated that all the improvements would be completed by 2005.

Construction of the original project was divided into three stages due to limited State funding, and Stages One and Two have been completed. Stage One, completed in 1998, improved the SR 520/West Lake Sammamish Parkway interchange (including a new bridge over the Sammamish River), added a new interchange at SR 520 and SR 202, and widened the existing lanes and shoulders along the mainline. Stage Two, completed in 2002, relocated and enhanced Bear Creek, mitigated wetland impacts from the creek's relocation and the eventual full buildout of the Preferred Alternative. Stage Two also acquired the additional right-of-way to accommodate both the creek relocation and the eventual full buildout of the project. Stage Three of the Preferred Alternative – this project – is being funded by the 2003 Legislative Transportation Funding Package ("Nickel Funding Package").

This SEPA Addendum updates transportation and environmental information in conjunction with the final design development for the last stage of the project. This SEPA Addendum also reports changes in regulations and policies that affect construction of these improvements.

Where is the project?

The project footprint (Figure S-1) follows SR 520 from just west of the West Lake Sammamish Parkway interchange to NE Union Hill Road in Redmond; this is the same alignment chosen as the Preferred Alternative in the 1992 Final EIS.

What are the main project elements?

This project completes the full buildout of the Preferred Alternative as presented in the 1992 Final EIS and includes the following:

- Widening the mainline (SR 520) from two lanes in each direction to two general-purpose lanes and high-occupancy vehicle (HOV) lanes (in the eastbound direction only, the HOV lane continues beyond the interchange with SR 202)

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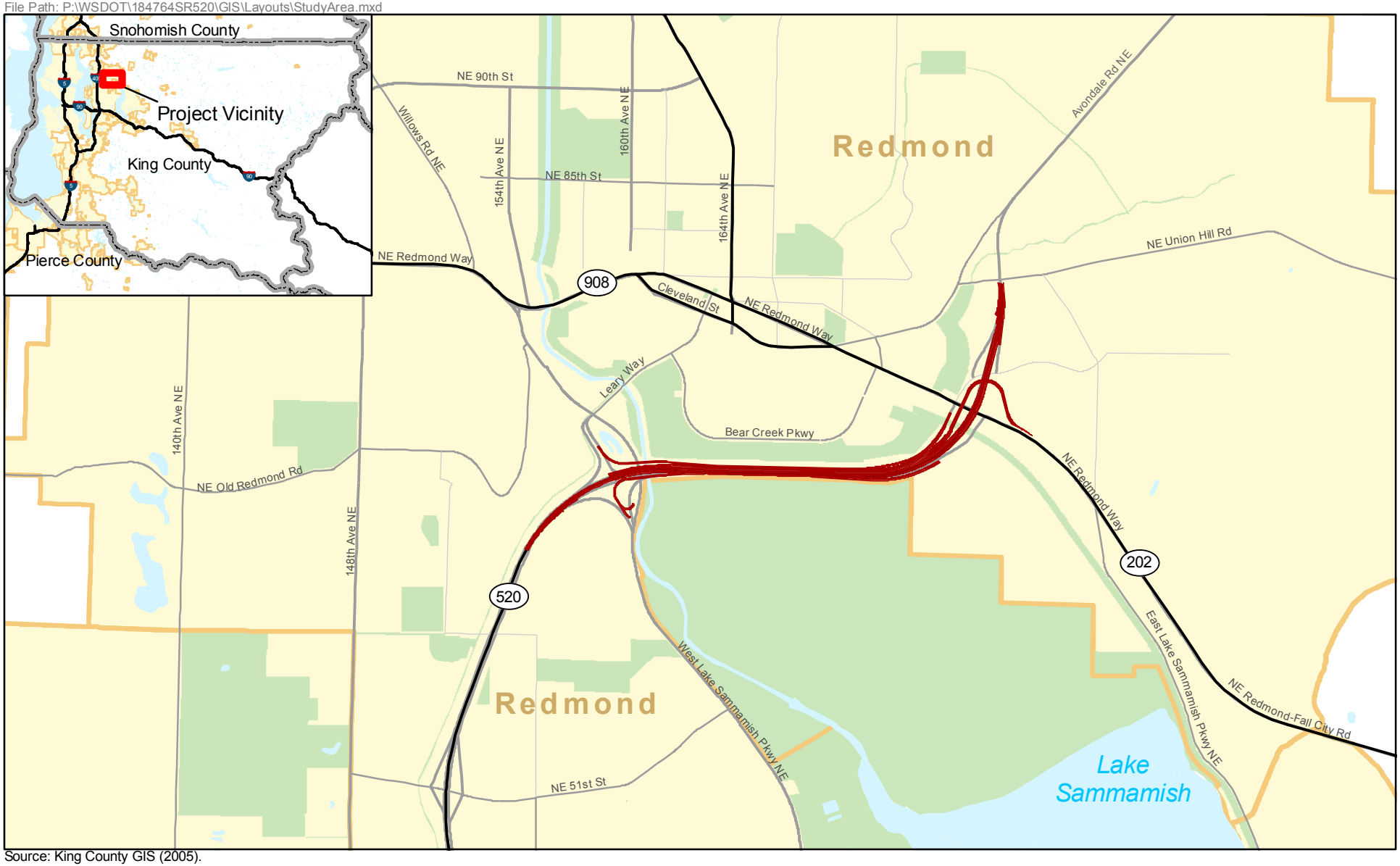


Source: King County GIS (2005).

Project Footprint (Edge of Pavement)
Parks
City

N

0 0.25 0.5 Miles

FIGURE S-1
Vicinity Map
SR520/West Lake Sammamish Parkway to SR 202

- Constructing an auxiliary lane in each direction between West Lake Sammamish Parkway and SR 202 (Figure S-2).
- Constructing two new, single-lane bridges to accommodate on- and off-ramps at the West Lake Sammamish Parkway interchange
- Constructing a new flyover on-ramp from northbound SR 202 to westbound SR 520, which includes widening the existing sidewalk to include a bicycle and pedestrian pathway connecting through the interchange (The 1992 Final EIS did not specify the exact location of the bicycle and pedestrian path, but it did commit to building one that bypassed the interchange and provided a safe route for these users.)
- Constructing water quality wet ponds, water quality wet vaults, and biofiltration swales to treat stormwater before it is discharged into Bear Creek and Sammamish River
- Widening the existing eastbound West Lake Sammamish Parkway, State Route 202, and NE 76th Street bridges to accommodate the project's new lanes

Why do we need this project?

The need for the project improvements remains the same as that stated in the 1992 Final EIS: residential and commercial growth and development in the study area have continued at a steady pace and increased the number of vehicles using the roadway. This project is still needed because the existing interchanges of SR 520 with West Lake Sammamish Parkway and SR 202 experience congestion, which results in long delays and the increased potential for accidents. The project would add capacity, relieve congestion, and improve safety. Capacity improvements include auxiliary lanes at the West Lake Sammamish Parkway and SR 202 interchanges along eastbound and westbound SR 520, a northbound-to-westbound flyover ramp from SR 202 to SR 520, and additional HOV lanes in both directions along SR 520 between West Lake Sammamish Parkway and SR 202. East of the SR 202 loop ramp, the HOV lane would be constructed in the eastbound direction only on SR 520 (Figure S-2).

When would construction begin and how long would it take?

The project would be constructed in two separate phases: Phase 1 and Phase 2. Phase 1, also called the "early stage," would include constructing the new flyover ramp from northbound SR 202 to westbound SR 520 (Figure S-3). The bicycle and pedestrian path would also be constructed during this early stage. Phase 1 is expected to begin in 2007 and be open to traffic by the end of 2007. Phase 2 would include the remaining improvements and is expected to begin construction in 2009 and reach completion in 2011. Advancing construction of the flyover ramp would reduce traffic congestion much sooner than originally planned.

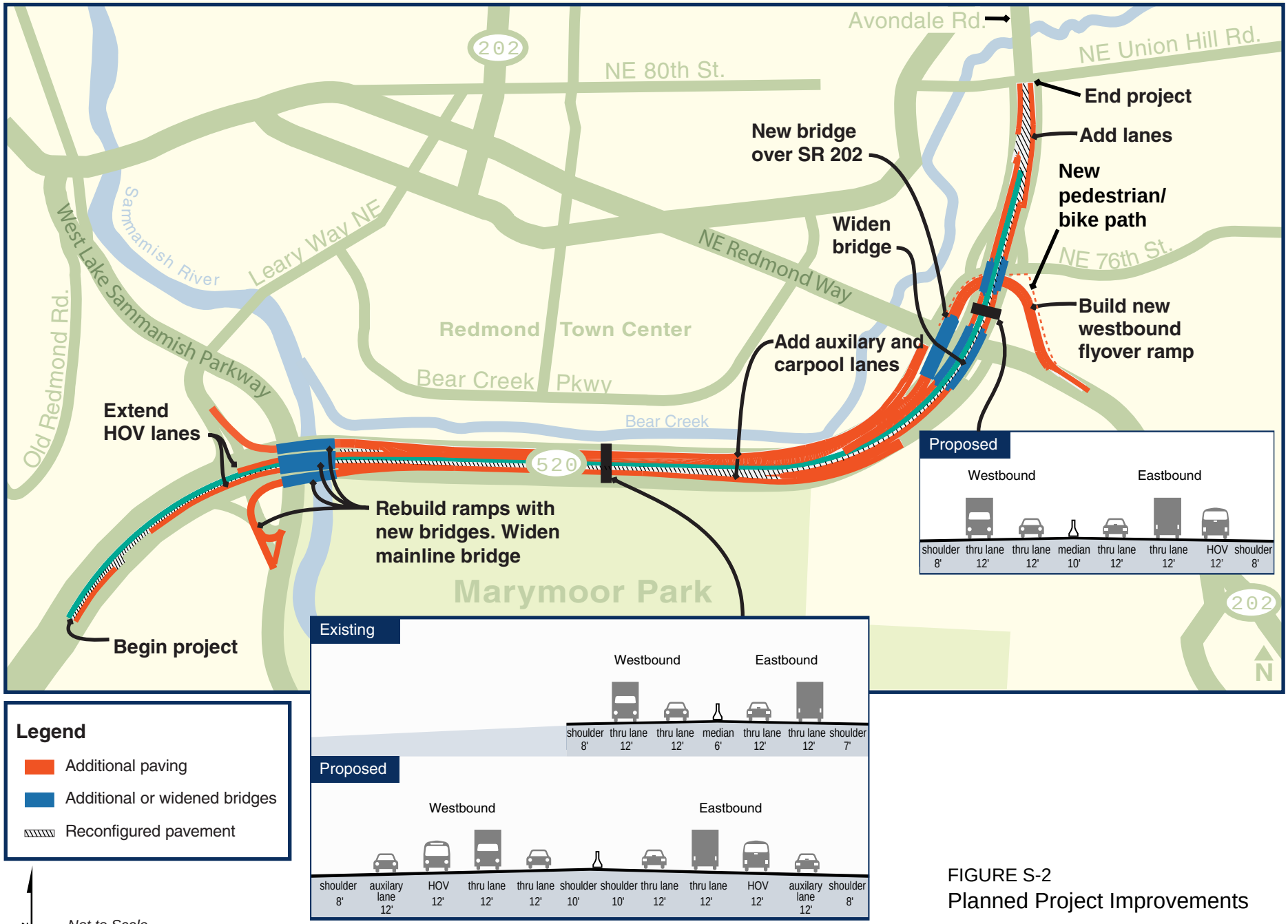
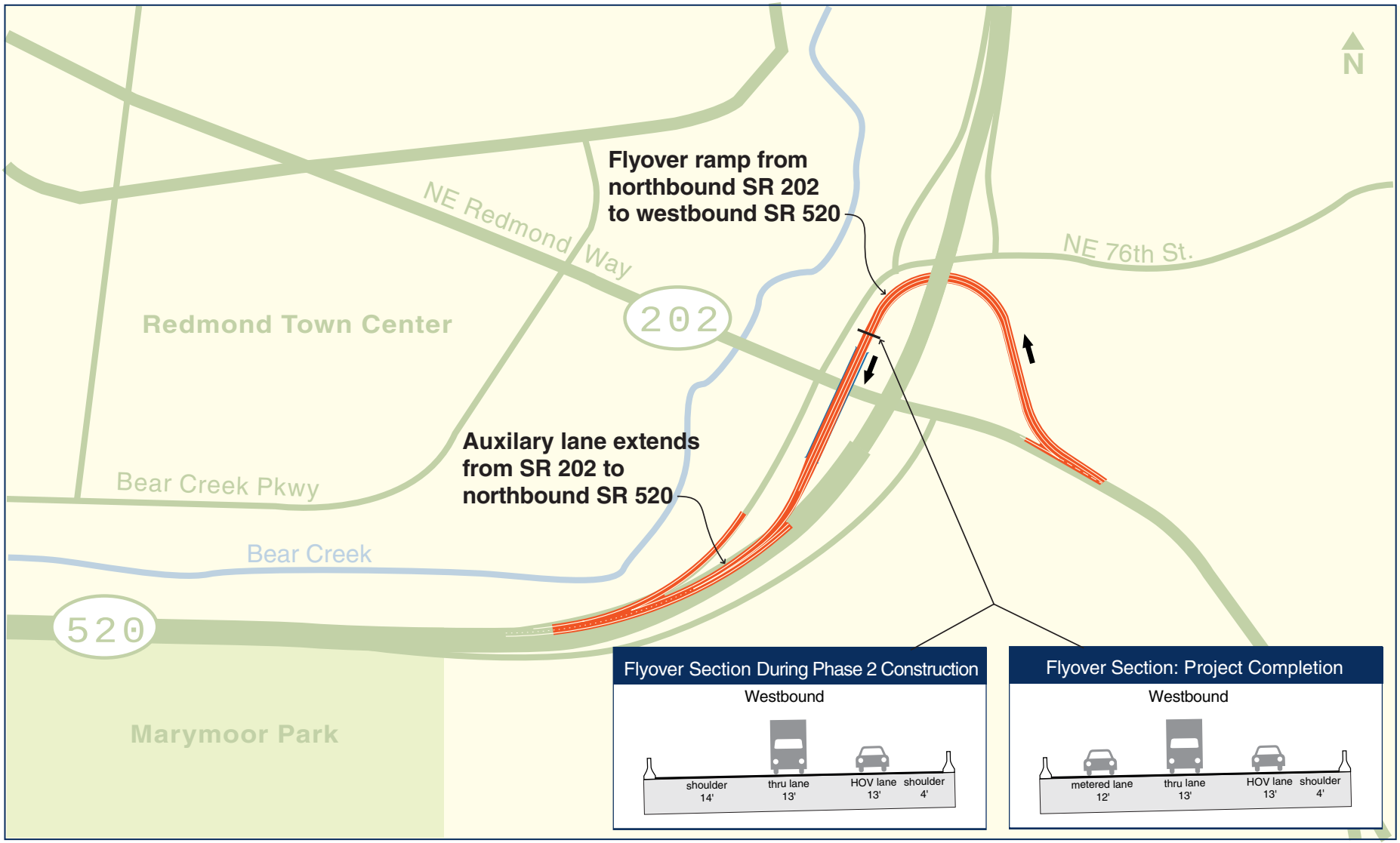


FIGURE S-2

Planned Project Improvements

SR 520/West Lake Sammamish Parkway to SR 202



N

Not to Scale

FIGURE S-3
Planned Flyover Ramp
SR 520/West Lake Sammamish Parkway to SR 202

How would the project affect the natural environment?

There would be no substantial adverse effects on the built or natural environment resulting from the project improvements (elements of the built and natural environments are analyzed in Chapter 3). The following discussion highlights findings of the analysis:

- **Geology and Soils.** Effects are the same as reported in the 1992 EIS. Project grading and embankment construction would result in modified site topography. Unsuitable native soils would be identified through exploratory drilling for wall and bridge foundations during final design. These soils would be removed or special engineering measures would be used to control settlement before construction.

- **Air Quality.** The conclusion in the 1992 Final EIS remains valid for this SEPA Addendum. New analyses completed for the project shows that it would not result in any substantial adverse air quality effects and would not cause or contribute to any violation of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO).

- **Water Quality.** As stated in the 1992 Final EIS, the project adds additional impervious surfaces to the study area. During the final design for the previous two project stages, the total acreage of impervious surface—both existing and proposed—increased over the amount reported in the EIS. The new analysis completed for this project, which used the more definitive totals, has measured 12.3 acres of new impervious surface associated with this project. The improvements include stormwater treatment facilities, which would improve water quality by reducing the annual total load of suspended solids carried into adjacent water bodies.

- **Floodplains.** The Bear Creek floodway has changed as a result of a previous project stage documented in the 1992 Final EIS. Relocating a portion of Bear Creek and adding construction-associated fill contributed to this change. The analysis for this last project stage used information on the original limits of the floodplain and floodway and completed new modeling with the surveys of the changes that resulted from earlier construction stages. This new analysis shows that the project would not exceed the allowable threshold of a one-foot rise for the 100-year flood under City of Redmond regulations.

- **Groundwater.** As reported in the 1992 Final EIS, the project would increase the amount of impervious surface; however, this increase would have a minimal effect on the local aquifer's recharge because of the aquifer's large size and the abundance of surface water available for recharge. Developing a spill prevention control and countermeasures (SPCC) Plan for construction would include measures to protect groundwater from accidentally released hazardous materials. The project would not affect City of Redmond drinking water wells.

- **Wetlands.** Wetland impacts were disclosed in the 1992 Final EIS. A new wetland analysis was completed for the project due to the passage of time since the original inventory and changes in both WSDOT policy and in various local, state, and federal regulatory agencies' reporting requirements. This project would permanently impact approximately 0.61 acre of wetlands and 1.25 acres of wetland buffer. There would be temporary impacts on 0.13 acre of wetland and 0.85 acres of wetland buffer. To offset wetland impacts, WSDOT would use

the Happy Valley mitigation site in the Evans Creek drainage, approximately 2.5 miles east on SR 202.

- **Plants and Animals.** A new analysis of the effects to plants and animals in the study area was completed due to the passage of time since the studies for the 1992 Final EIS and the changed environment due to the relocation of a portion of Bear Creek. The project also needed to address effects to additional species that have become protected under the Endangered Species Act (ESA). The bald eagle remains a federal and state threatened species. The only bald eagle nest near the study area lies one mile southeast of the project improvements. Chinook salmon were declared a federal threatened species in 1999; Chinook salmon are expected to use the Sammamish River and Bear Creek. The project would remove trees that provide shading, perching, and nesting habitat; however, there are no known important nests or rookeries in the immediate study area. The roadway encroachment near the riparian buffer along SR 520 might deter wildlife from the area and might reduce forage opportunities. Stormwater runoff from additional impervious surfaces added to the study area would be detained and treated in the water quality features built during previous stages as well as those constructed for this project. Proposed mitigation for wetland effects (discussed under Wetlands above) would also help offset plant and animal habitat effects.

- **Streams and Fisheries.** Since the 1992 Final EIS was published a portion of Bear Creek has been relocated and enhanced in anticipation of the final stage of project construction. The current project would not result in any in-stream impacts; however, 0.61 acre of stream buffer would be permanently impacted, and 1.01 acres would be temporarily impacted. Direct effects on fish species are not anticipated. Stream buffers would be replaced in conjunction with wetland and wetland buffer mitigation on a separate site in the Bear Creek basin, which is known as the Happy Valley mitigation site in the Evans Creek drainage, approximately 2.5 miles east on SR 202.

How would the project affect the built environment?

Based on the analysis completed for this SEPA Addendum, there would be no substantial adverse effects on the built environment (elements of the built environment are analyzed in Chapter 3). The following discussion highlights findings of the analysis:

- **Noise.** Noise levels under the project are projected to vary between a 1-decibel (-dBA) to 5-dBA increase by 2030 over existing conditions. Noise modeling indicates that noise levels would approach or exceed the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) at 11 locations out of 19 modeled sites. Noise levels at six of these sites currently approach or exceed the NAC; four of the modeled sites that would approach or exceed the NAC are residential locations. Potential noise barriers were evaluated for the residential locations that would approach or exceed the NAC; however, none of these barriers were determined to be both feasible and reasonable. Consequently, no mitigation for noise effects is proposed as part of the project.

- **Hazardous Materials.** Since the 1992 Final EIS was published more properties have been identified as contaminated or potentially contaminated in a variety of databases and other sources that occur in the study area. Several contaminated sites have been identified near

the project improvements; however, the project is not expected to affect any of these sites. Additionally, the project would improve traffic flow, which would reduce the potential for accident-related spills.

- **Land Use.** The project would not displace any businesses or residences and would not result in any changes to existing land uses. The project would also support existing land uses and is consistent with the goals in applicable adopted land use plans.

- **Recreation.** Design changes incorporated into the project and reported in the 1992 Final EIS resulted in no impacts to parks and recreation facilities. Two new bicycle pedestrian trails have been constructed since the EIS was published. The project would not result in any long-term adverse effects on recreation facilities. The project would have a positive effect by providing a safe route for users of the new East Lake Sammamish Trail to access the new Bear Creek Trail via a new bicycle and pedestrian pathway between SR 202 and NE 76th Street.

- **Cultural Resources.** A new cultural resource study was completed for the project due to the passage of time since the original study was completed. No new listed or eligible historic properties were identified that would be impacted by the project. The new analysis also included additional subsurface testing to attempt to locate buried cultural resources in locations adjacent to the Sammamish River and Bear Creek; none were found, and it was determined that the project would not likely effect archaeological resources in the study area.

- **Visual Quality.** Continued commercial growth in the immediate study area since the 1992 Final EIS was published has changed the visual environment adjacent to the study area. As disclosed in the 1992 Final EIS, the project would increase the human-built elements and decrease the natural elements in the study area. With the project, the planting design would be consistent with other project stages, and bridge structures would be designed with simplified lines and consistent with the design of the existing structures. These project features would serve to visually blend the project elements into the environment and reduce the visual intrusiveness.

- **Transportation.** Project benefits remain consistent with those disclosed in the 1992 Final EIS. A new traffic analysis was completed to predict the performance of the improvements and quantify the benefits. The project would improve traffic operations on SR 520 by reducing travel times, increasing traffic capacity, and improving safety. Additionally, the project would improve traffic operations along SR 202 and nearby streets.

- **Services and Utilities.** The effects from the project would remain very similar to those disclosed in the 1992 Final EIS by generally positively impacting local public service providers by improving traffic operations on SR 520 and improving local circulation in the study area.